



December 14, 2020

**FOCUS ON:**  
Transportation





**HARTWELL ZONING & TRANSPORTATION**  
**December 14, 2020**  
**Agenda**



**Welcome**

**Overview of Sustainability Discussion**

Stella Carr, Director of Sustainability: Town of Lexington

**Transportation Overview**

Sheila Page - Assistant Planning Director: Town of Lexington

**Encouraging Alternative Modes**

Peter Sutton - State Bicycle and Pedestrian Coordinator: MassDOT

**Managing Transportation Demand**

Lispeth Tibbits-Nutt

Manager Communications, Research & Education: 128 Business Council

**Using Zoning to Help Mitigate Traffic**

Eric Bourassa: Transportation Director: MAPC

**Discussion/Q & A**

**Ground Rules**

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- Please remain on mute
- Please use your real name as your screen name
- In the interest of time, the Discussion and Q & A will be at the end,
- Please use the raise hand function to speak. Or \*9 on your phone
- If you cannot raise you hand please use the chat function.
- This meeting is being recorded.
- The recorded meeting and all the resources will be available on the Town website: [www.HIPLexington.com](http://www.HIPLexington.com)

# FORUM WILL BE INTERACTIVE

## RAISE YOUR HAND

To speak use the raise hand function  
Or dial \*9 on your phone



## CHAT

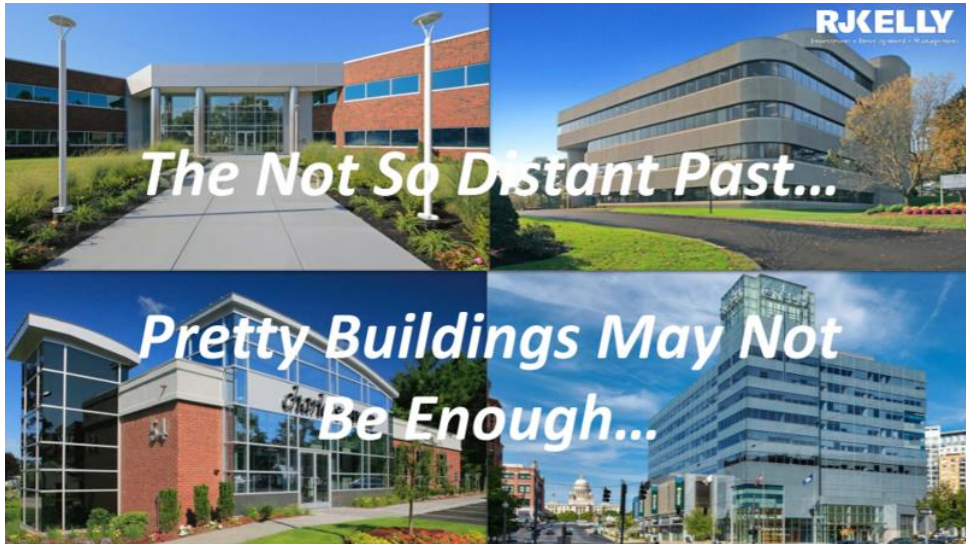
Use the chat function if you  
need technical help



## POLL



# Hartwell Initiative Sustainability Recap



## What is important? *Polling results*

### HIP Built Environment

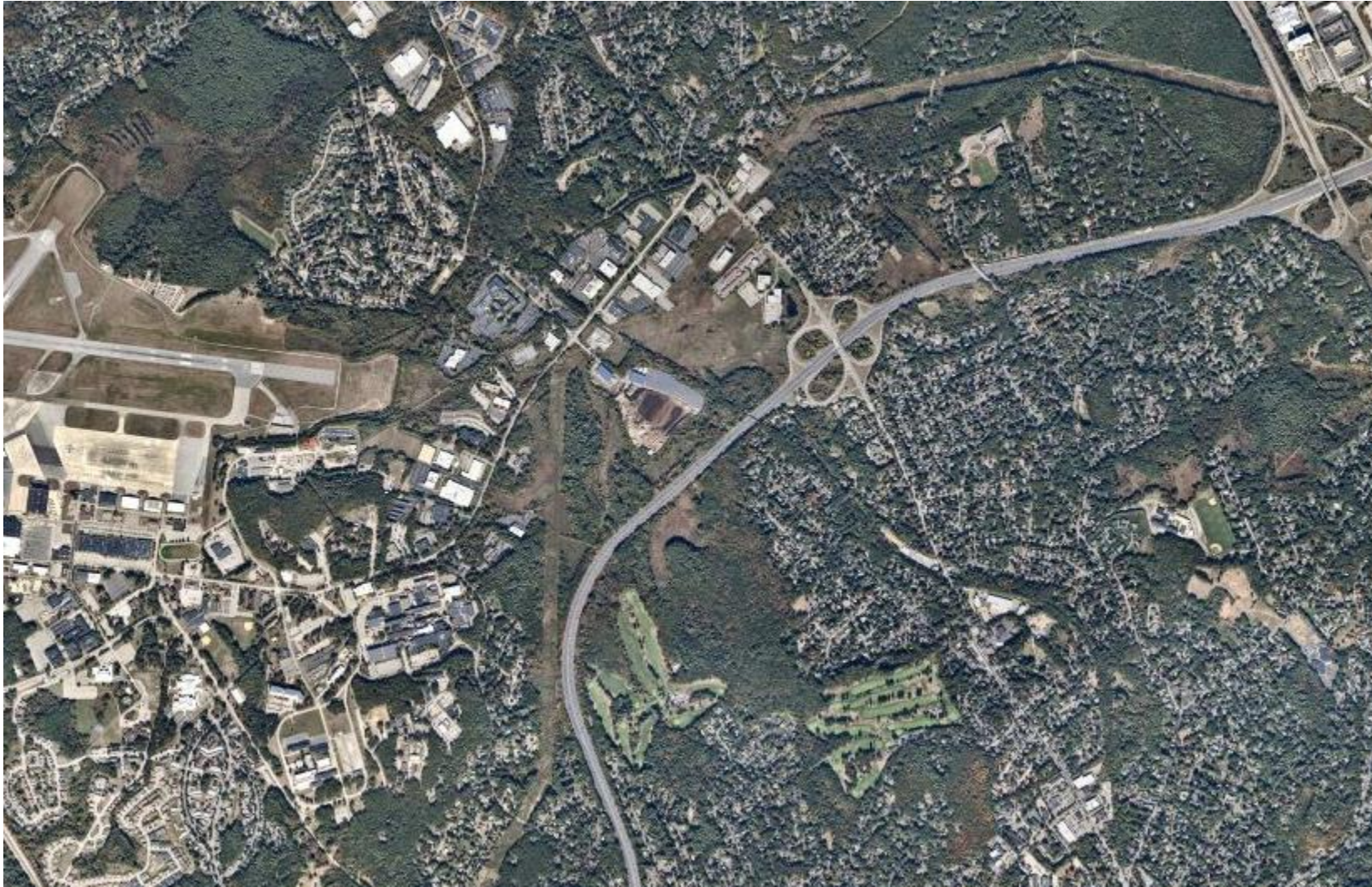
1. Decrease emissions produced by buildings
2. Maximize alternative non-car transportation options
3. Visible sustainability (solar, recycling, etc)

### HIP Natural Environment

1. Decrease emissions produced by vehicles
2. Manage Storm water
3. Prioritize native species in green spaces



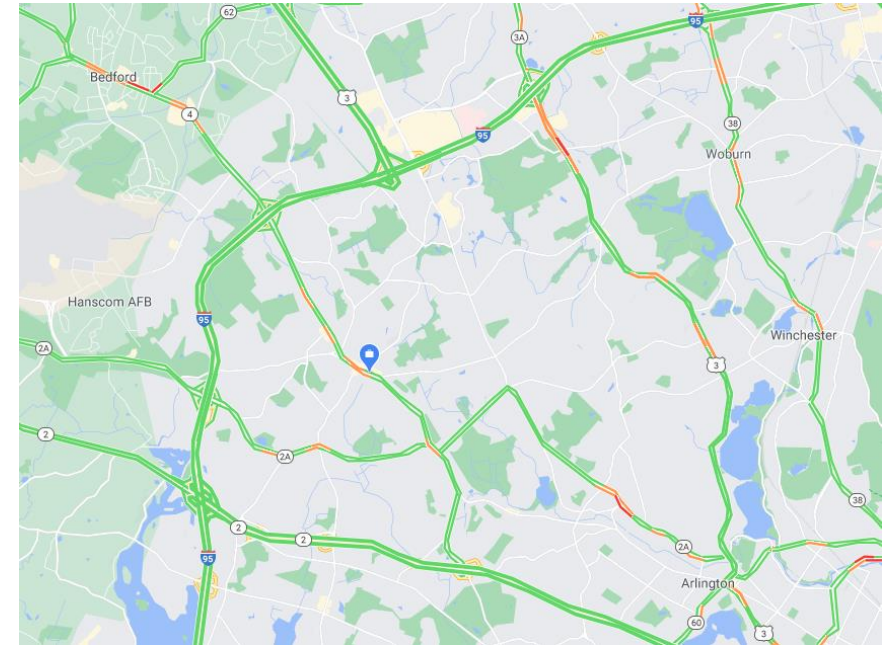
# Managing the Transportation and Traffic



# Managing the Transportation and Traffic

## What We Know:

- The region has a traffic problem
- Commuting and transportation patterns have been disrupted.
- Difficult to predict post-COVID
- Traffic will take time to rebound and normalize.
- Growth will be incremental





# Managing the Transportation and Traffic

## What we know:

- Traffic is bad: Level of Service (LOS) between C and F - but mostly F
  - Hartwell/Bedford Intersection operating slightly better in 2018 than in 2007
  - Unsignalized intersections operating worse in 2018 than in 2007
- Hartwell/Bedford Intersection - region's top 200 crash locations
- Eldred Street has a lot of cut through traffic in the evening
- Wood Street has similar volumes in both morning and afternoon with mornings being slightly busier

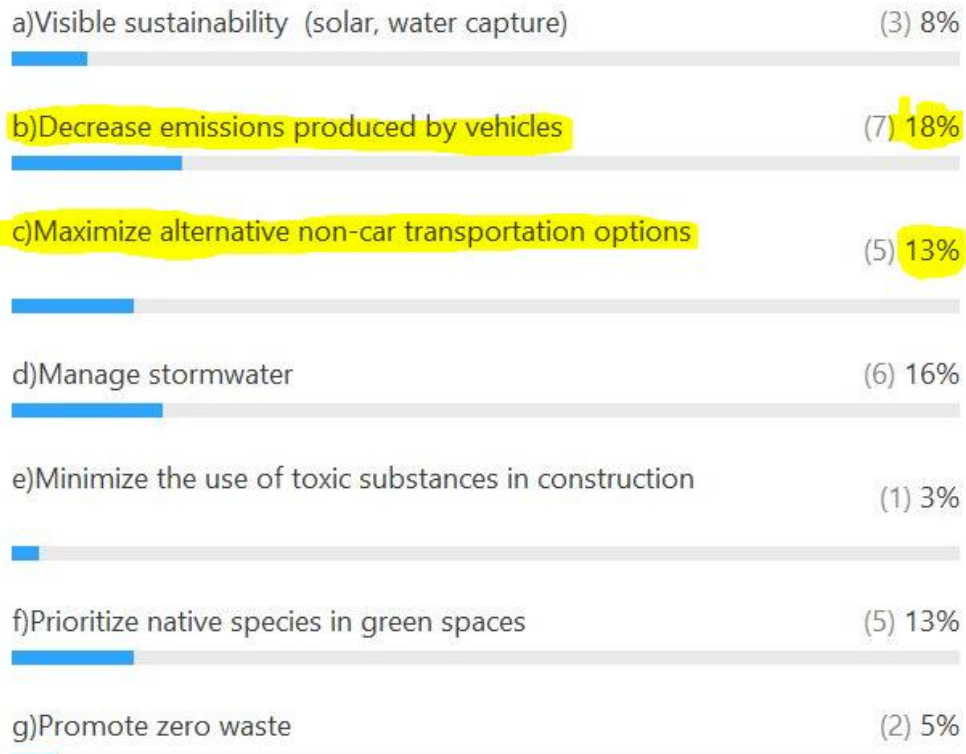
### References:

*Memorandum - Preliminary Transportation Impacts Hartwell Avenue – Proposed Hartwell Avenue Zoning Initiative* prepared by Stantec July 2018  
*Hartwell Avenue Traffic Study – Technical Memo* prepared by Howard Stein Hudson 2008  
*Hartwell Area Traffic Mitigation Plan* prepared by Tetra Tech 2010

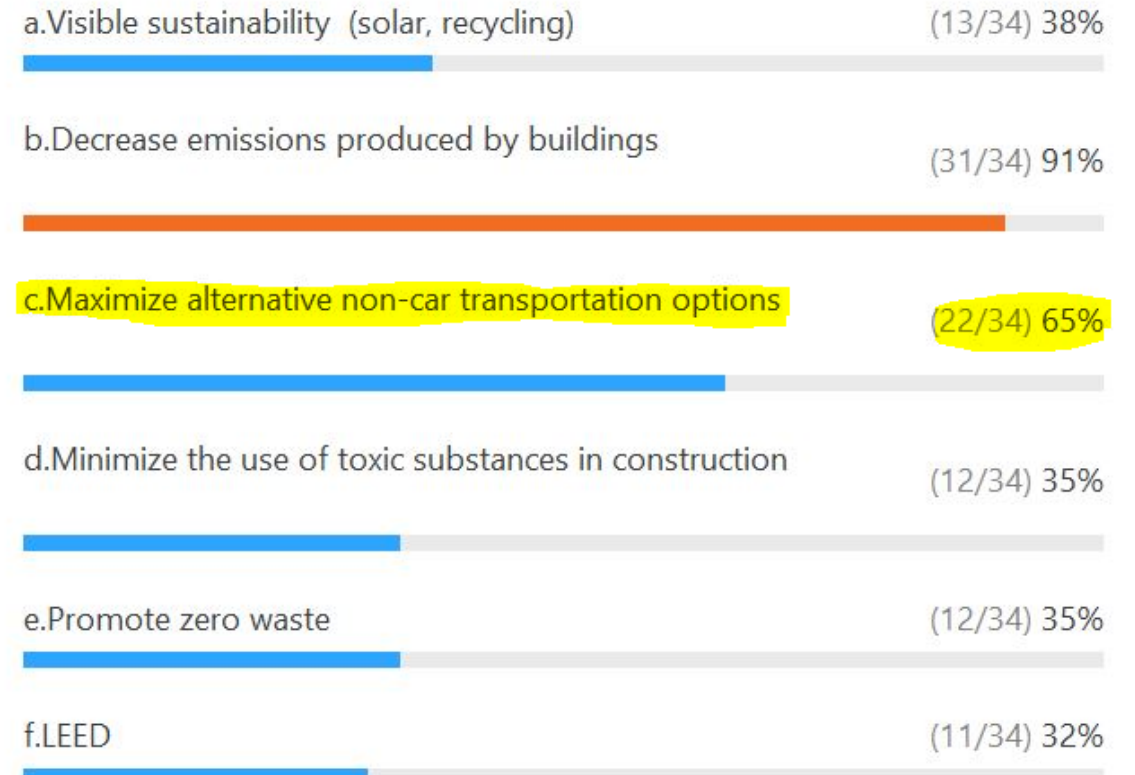
# Managing the Transportation and Traffic

Good for our sanity, Good for the economy & Good for the environment

## 1. 3. Choose the most important sustainability features for the future HIP NATURAL environment.



## 1. Choose the three most important sustainability feature for the future HIP BUILT environment. (Multiple choice)





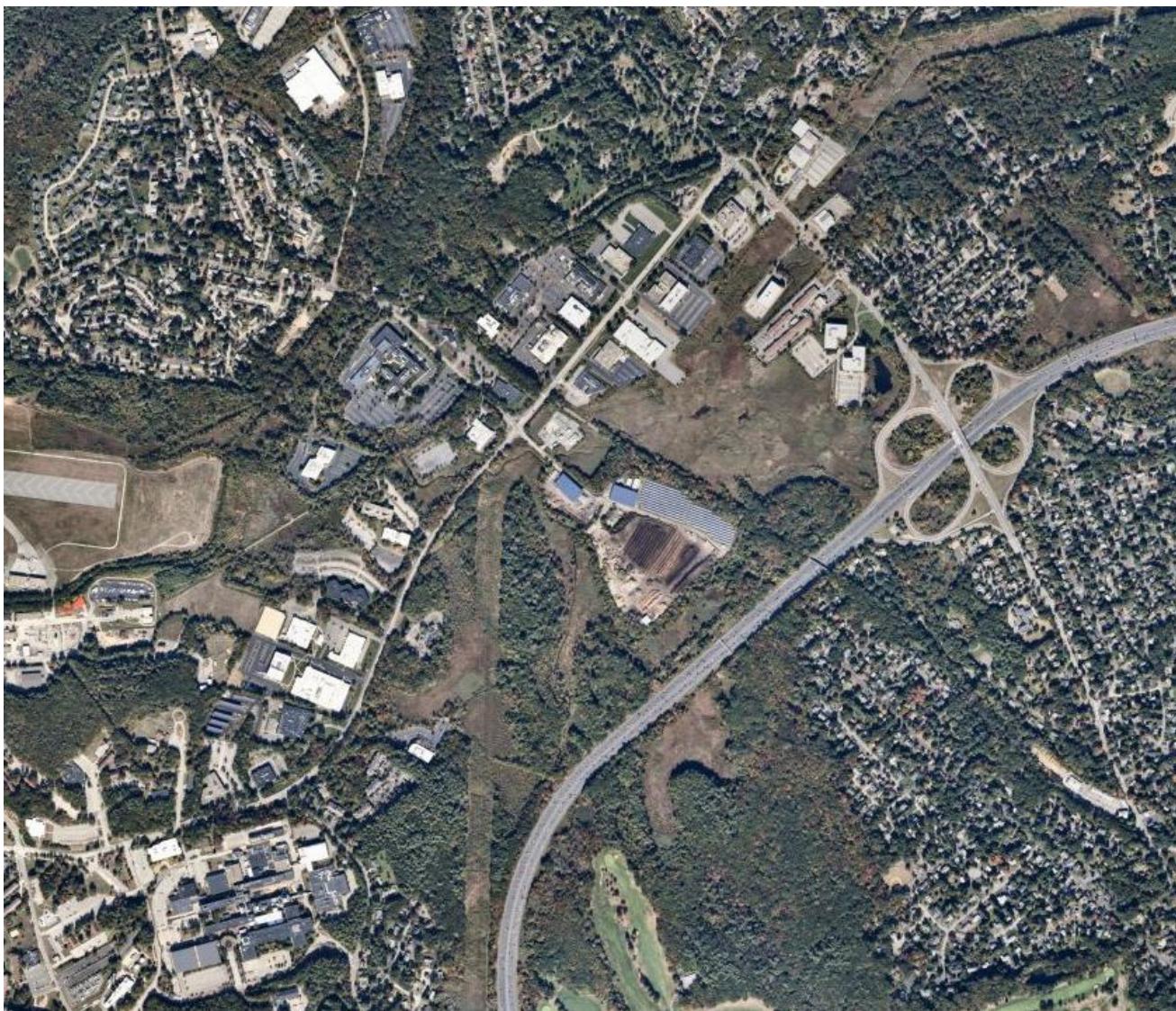
# Managing the Transportation and Traffic

## POLL QUESTION

**Do you or someone in your household use a means other than the car for your commute, at least part of the way?**

- ☐ Yes, I take public transit (MBTA, Lexpress)
- ☐ Yes, I take a private shuttle
- ☐ Yes, I bike
- ☐ Yes, I walk
- ☐ No, I drive the whole way





## Opportunity

- Create programs that focus on moving people not cars
- Create infrastructure to support alternative modes of transportation
- Manage our roadway network
- Provide more commuter options
- Deploy traffic calming techniques
- Create safer pedestrian and bicyclist environment



# Managing the Transportation and Traffic



- **Current Zoning**
- **Transportation Management Overlay District**
- **Transportation Project Updates**

# Managing the Transportation and Traffic - Current Zoning

## Site Plan Review - through TMOD or Conventional Traffic Review

### TMOD Route

Chap 135 Sec 7.2 Transportation Management Overlay District (**TMOD**) supersedes Sec 5.1 (parking) and 5.5 (traffic) Chap 176 Section 10.2 - TMO— Hartwell Ave Area District Plan

- 5.1 Parking minimum is the maximum
- PTDM Plan—TMA and other incentives=goal to 85% SOV trips
- Mitigation fee—\$5/sqft net floor area (add'l fees over 100,000 sqft)
- Bike parking ratio 1 per 15

Chapter 176 Section 9.4 and 9.7 Traffic Standards Applies

### Conventional Zoning Route

Chap.135 Sec. 5.1 Parking Standards and Sec. 5.5 Traffic Standards Apply

- Traffic Study
- Adequate Traffic Capacity
- Consider mitigation measures to improve capacity
- Trip reduction requirements
- Desiring LOS of D
- Mitigation possible to bring LOS to D or higher.

Chapter 176 Section 9.4 and 9.7 Traffic Standards Applies



# Managing the Transportation and Traffic – Other Efforts

## **RT4/225 Bedford Street/Hartwell Complete Street Major Infrastructure Project**

- MPO Long Range Transportation Plan - 2030-2034 Funding Time Band
- 25% Design - Consultant Selection
- Maguire/Hartwell Intersection Improvement

## **Hartwell Area Transportation Management Plan**

- Required by TMOD
- Outlines Mitigation Process
- Traffic calming & reducing SOV's

# Managing the Transportation and Traffic

## POLL QUESTION

**With regard to transportation in the HIP, which of the following do you feel is the most important improvement to make?**

- **Discourage vehicles from cutting through the residential neighborhoods**
- **Safer access to the Minuteman Bikeway**
- **Reduce speeds through the neighborhoods**
- **More access to transit**
- **Safer pedestrian crossings**





# Managing the Transportation and Traffic – HIP Zoning

## **HIP Zoning - Doing better at:**

- Reducing SOV's
- Promoting Alternative Modes of Transportation
- Partnering in traffic mitigation through transportation demand management

## **Balancing the needs of:**

- Residential Neighbors
- Town of Lexington
- Businesses
- Region

## **While Acknowledging:**

- Pandemic adds an element of uncertainty
- Post pandemic – new travel and commuting patterns

# Managing the Transportation and Traffic

## **Encouraging Alternative Modes**

Peter Sutton - State Bicycle and Pedestrian Coordinator: MassDOT

## **Managing Transportation Demand**

Lispeth Tibbits-Nutt

Manager of Communications, Research & Education: 128 Business Council

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Eric Bourassa: Transportation Director: MAPC



# Examples of recent MassDOT projects involving placemaking

- Infraspaces Under I-93
- Mattapoissett Rail Trail
- Encore Casino
- Suffolk Downs redevelopment

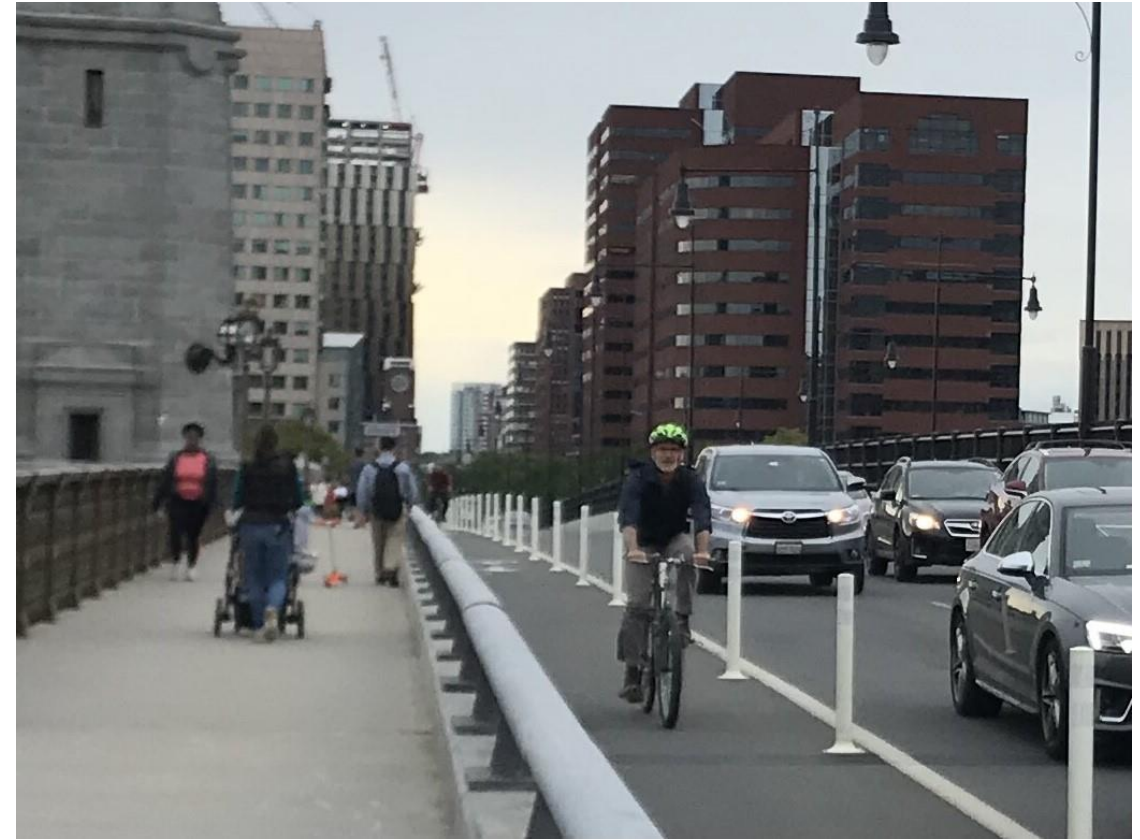


Source: cdt  
Figure 3.8  
Building Massing Strategy  
Suffolk Downs Redevelopment  
Boston & Revere, Massachusetts





## Examples of bicycle and pedestrian improvements



## Examples of bicycle and pedestrian improvements



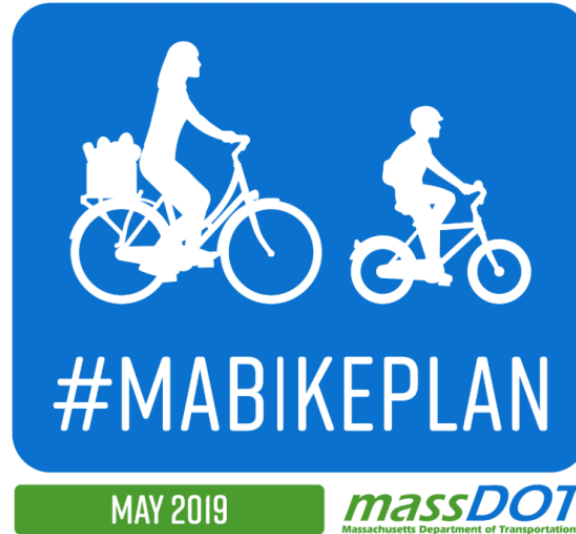


## Examples of bicycle and pedestrian improvements



- Planning Resources:
  - Statewide Bicycle Plan
  - Statewide Pedestrian Plan
  - Municipal Resource Guide for Bikeability
  - Municipal Resource Guide for Walkability

# MASSACHUSETTS BICYCLE TRANSPORTATION PLAN





#### 4. Upcoming state bike and ped funding opportunities and projects

- [MassDOT Shared Streets and Spaces](#)
- \$10M in new funding released to help manage the impacts of the pandemic during the winter months (including bus shelters!)
- Applications are being accepted on a rolling basis through March 26
- Projects must be mostly or completely implemented by May 31
- [MassDOT Complete Streets](#)
- Up to \$400K available for bike/ped/transit improvements on local roads
- Spring 2021 grant round opens April 1<sup>st</sup> until May 1st
- [MassTrails](#) Grants
- Up to \$300 available for feasibility, design, construction and maintenance
- 2021 grant round deadline February 1st



Pete Sutton  
Bicycle and Pedestrian Program Coordinator  
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[www.mass.gov/massdot](http://www.mass.gov/massdot)

# Managing the Transportation and Traffic

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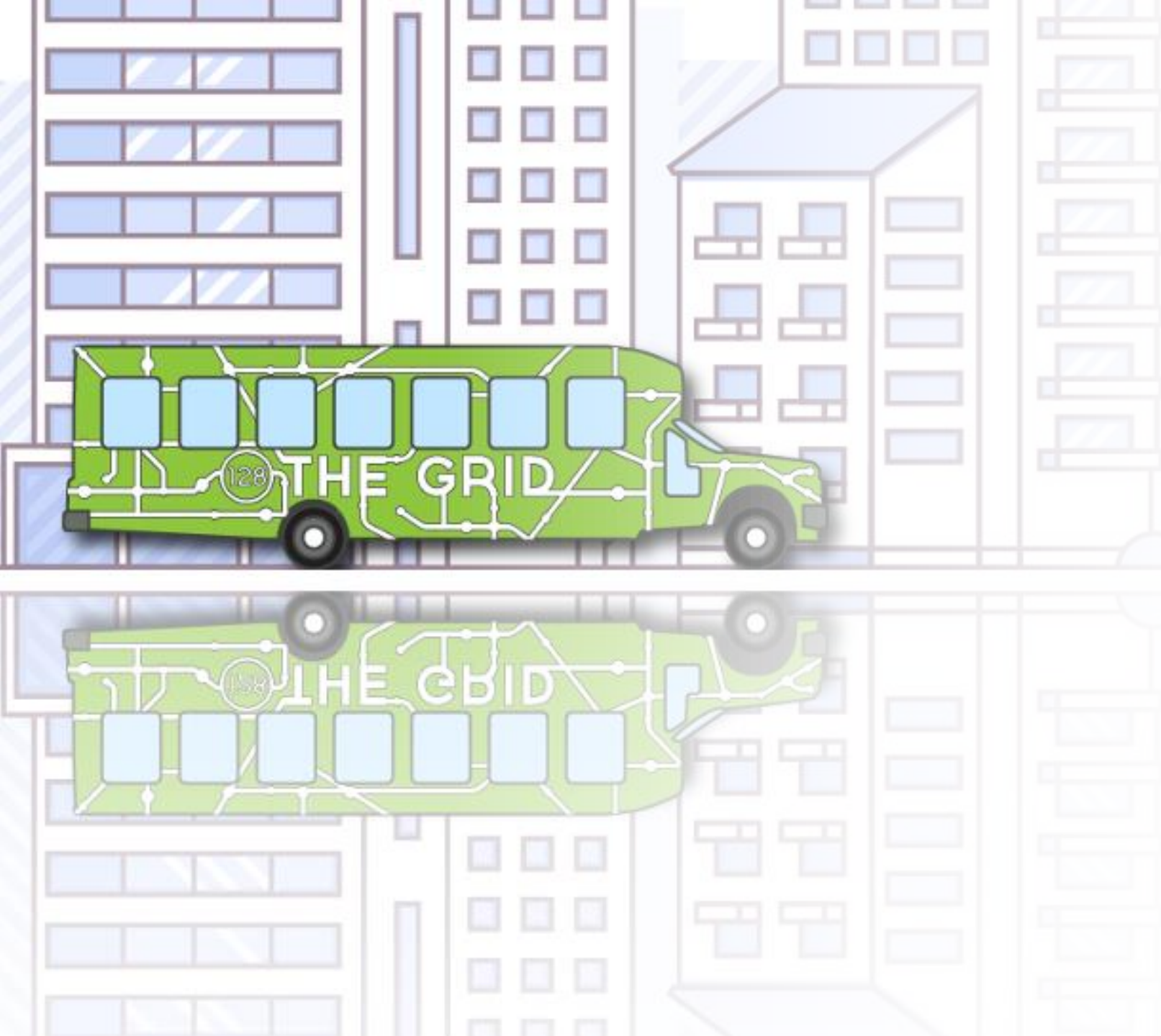
Eric Bourassa: Transportation Director: MAPC

# What is a Transportation Management Association?

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Who is 128  
Business  
Council?

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What is 128BC  
already doing  
in Lexington?

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What can the **Town** do  
(through the zoning &  
permitting process)  
to better contribute toward its  
transportation-related goals?



What can **Developers** do  
to contribute to  
Lexington's  
transportation-related  
goals?

What can **the Community** do  
to contribute to Lexington's  
transportation-related goals?



Contact me directly:

LISPETH J. TIBBITS-NUTT

Manager of Communications, Research & Education

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[128bc.org](http://128bc.org)

# Managing the Transportation and Traffic

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# Hartwell Rezoning Initiative

## How Zoning Can Help to Mitigate Traffic

Eric Bourassa, Transportation Director

December 14, 2020



# What is Transportation Demand Management (TDM) ?



Strategies used to influence travel behavior and encourage the use of alternative travel modes to reduce single-occupancy vehicle (SOV) use.



# Range of TDM Measures

## Pedestrian & Bicycling Improvements and Facilities

- Secure and safe bicycle parking and storage
- Showers and lockers for bicyclists
- Bicycle sharing
- Connectivity between adjacent sites and paths
- Infrastructure improvements (traffic calming, bicycle lanes)

## Public Transit

- Bus and shuttle service
- Bus shelters

## Employer-Based

- Subsidize transit (offer transit passes pre-tax or subsidize purchase)
- Flexible employee work schedules (compressed work week, flexible arrival/departure times)
- Teleworking
- Car-sharing
- Ride-sharing services (guaranteed ride home, ride-matching)
- Education (inform employees of options)

## Site Design/Land Use

- Require new buildings to locate parking behind buildings, away from the street
- Limit driveway curb cuts
- Require densifications/mixed-use elements for new developments
- Promote location efficient development (oriented to transit, good walking/bicycling conditions)





# Parking Management Strategies

- Parking Cash-Out
- Parking Pricing
  - Charge market rate
  - Charge parking on a daily, not monthly basis
  - Charge for on-street parking
- Preferential Carpool/Vanpool Parking
- Shared Parking
- Unbundled Parking
- Short-term Parking Lease Agreements





# Long Term Impact of Remote Working

## Pre-COVID Work From Home

- 18% of Massachusetts commuters worked remotely one day a week

## Current Conditions

- Recent City of Boston survey found that 60% of office workers are telecommuting everyday and an additional 17% are working from home half the time.

## Post-COVID Work From Home

- City of Boston survey and a recent MassInc Poll, both found that 2/3 of commuters want to work from home most of the time (3 – 5 days a week) after the pandemic.
- Global Workplace Analytics, an international consulting firm, estimates that 25%-30% of the workforce will be working-from-home multiple days a week by the end of 2021.

# Mode Share Goals and Monitoring

## Mode Share Goals

- Strive to implement a concise list of targeted and measurable TDM goals and requirements over a designated period of time (e.g., mode share goals, vehicular trips).
- Establish a well-defined process to monitor progress and compliance towards clearly established goals (e.g., vehicular trips) and outcomes (e.g., annual report or survey).

## Monitoring

- Develop clear and succinct municipal bylaw language that includes very specific requirements.
- Make incremental changes to bylaws. Adopting a series of small and attainable amendments will allow for a gradual transition to implement TDM measures.

## Enforcement

- Establish policies for non-achievement or non-compliance of program goals or failure to implement a TDM program. For example, a municipality can hold off on issuing new permits (e.g., occupancy permit). Municipalities and developers should establish cooperative relationships – enforcement should be a final recourse.

# Parking and Transportation Demand Management Ordinance – City of Cambridge

- Adopted in 1998; made permanent in 2006
- Links parking and TDM
- Trigger is creation of new non-residential parking
- Building permits, variances, etc. only issued with approved PTDM plan
- Enforcement

## Large Project PTDM Plan (20+ parking spaces)

- SOV mode share commitment
  - 10% below 1990 Census Data or Traffic Impact Study
- Commit to a comprehensive set of TDM measures
- Strict monitoring and reporting provisions (every two years)
  - Employee mode split survey
  - Implementation status of TDM measures
  - Driveway and parking occupancy counts



# City of Cambridge Case Study

## Seven Cambridge Center (Broad Institute)

- Very low SOV rate (22% in 2019) which has been in the 20-30% range since 2006.
- Very low parking ratio (.78 spaces per 1,000 square feet).



## The City of Cambridge:

- Has found that low parking ratios are consistently linked to low SOV rates in their monitored projects. Projects with higher parking ratios tend to have higher SOV rates.
- Attributes the low SOV rate to the fact that many of the tenants charge employees for parking (~50% market rate) and provides a transit subsidy (site is located one block from the Red Line) and provides free EZRide shuttle service to employees.
- Sees other projects achieving low SOV rates with similar commute benefits.

# TDM and Trip Reduction in Zoning

## City of Somerville – Mobility Management Plan

- Requires a Mobility Management Plan for commercial space development (50,000 sf or greater).
- Development review applications not considered complete and permits cannot be issued until Mobility Management Plan is approved.
- Must include commitment to control the percentage of trips made by automobiles at 50% or less and to a comprehensive set of TDM measures.
- Annual reporting required.

## Town of Hadley – Trip Reduction Plan

- Requires a Trip Reduction Plan for Commercial Site Plan Approval (buildings 10,000 sf or greater).
- Trip Reduction Plan needs to identify strategies to reduce vehicle trips by 35% and outline TDM measures.

# Managing the Transportation and Traffic

## POLL QUESTION

What would encourage you and other people you know to commute at least part of the way without using your car?

- Showers/locker rooms at the workplace
- Subsidized transit pass
- Having to pay for parking
- More Access to transit
- Safer Pedestrian or bicycle route to work
- Accessible Park and Ride
- Baby Stroller & car seat storage
- Pleasant Bus Shelters
- Emergency rides home or to child's school





# Managing the Transportation and Traffic

## Questions and Discussion

**HARTWELL**  
INNOVATION PARK

**VIRTUAL  
COFFEE**

THURSDAY

December 17th, 2020 8:00 AM

CREATING THE **HEART** OF HARTWELL

## Join the Discussion!

Lexington is looking for a rezoning solution that accommodates existing commercial uses but also cultivates new development in Hartwell Avenue.

We have long-range visualization and zoning recommendations, but actual improvements have not been designed yet and the Town has not taken any rezoning action.

Join the Town staff for a virtual coffee hour to get an update on our progress and how you can participate.

GET  
CONNECTED

ZOOM MEETING:

click here

[JOIN MEETING](#)

ZOOM URL:

<https://zoom.us/j/92655101561>

For more information about the  
Hartwell Rezoning Initiative visit:

[www.HIPLexington.com](http://www.HIPLexington.com)

## UPCOMING MEETINGS

- Thursday December 17<sup>th</sup> at 8am
- Thursday January 7<sup>th</sup> at 7pm
- Thursday January 21<sup>st</sup> at 7pm

Catch up from past meetings at  
**HIPLexington.com**

#LexTalkHartwell #HIPLexington



**Carol Kowalski**

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**Amanda Loomis**

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Planning Director

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**Casey Hagerty**

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**Sandhya Iyer**

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**Stella Carr**

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# GET IN

# TOUCH



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# Managing the Transportation and Traffic

**Thank You!**